## **ABSTRACT**

A power amplifier power amplifier includes a transconductance stage and a cascode stage. The transconductance stage that is operable to receive an input voltage signal and to produce an output current signal. The transconductance stage includes a first Metal Oxide Silicon (MOS) transistor having a first gate oxide thickness and a first channel length. The cascode stage communicatively couples to the transconductance stage and is operable to receive the output current signal and to produce an output voltage signal based thereupon. The cascode stage includes a second MOS transistor having a second gate oxide thickness and a second channel length.

5